



**US Army Corps
of Engineers**
Norfolk District

LYNNHAVEN RIVER BASIN ENVIRONMENTAL RESTORATION VIRGINIA BEACH, VIRGINIA



STUDY AUTHORITY

HOUSE RESOLUTION ADOPTED

MAY 6, 1998

PLANNING PROCESS

- RECONNAISSANCE (100%FEDERAL)
- FEASIBILITY (50%FED/50%NON-FED)

RECONNAISSANCE PHASE OBJECTIVES

- IDENTIFY PROBLEMS AND NEEDS
- DETERMINE FEDERAL INTEREST
- PREPARE PROJECT MANAGEMENT PLAN
- ASSESS LEVEL OF LOCAL SUPPORT
- EXECUTE FCSEA

STUDY PHASE OVERVIEW

COST OF RECONNAISSANCE	\$100K
COST OF FEASIBILITY (estimated)	\$2.0M

SCHEDULE

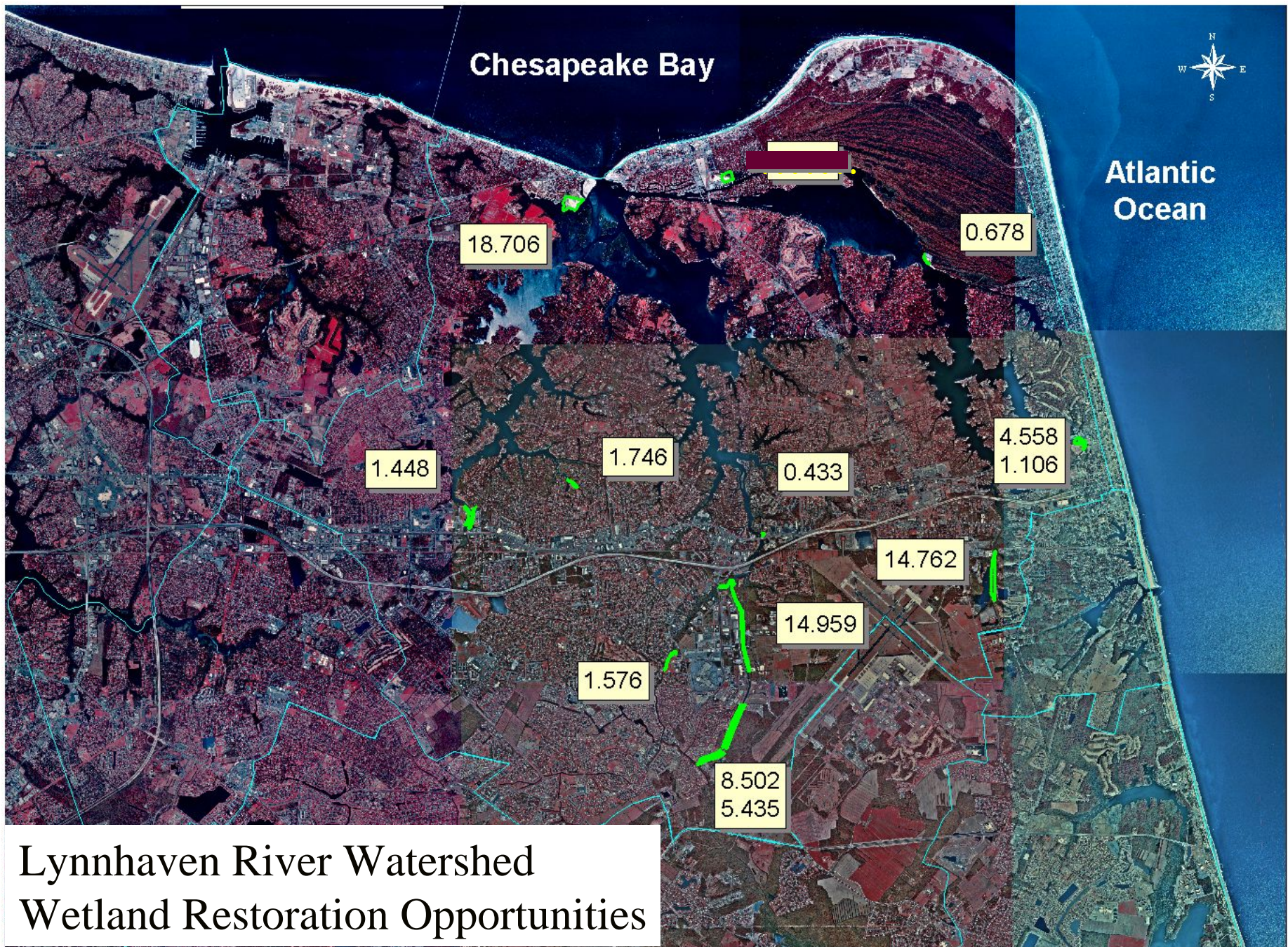
Initiate Reconnaissance	Jan 02
Draft Reconnaissance Report	Jun 02
Complete Reconnaissance	Jan 03
Execute FCSA/Initiate Feasibility	Mar 03
Complete Feasibility	Mar 06

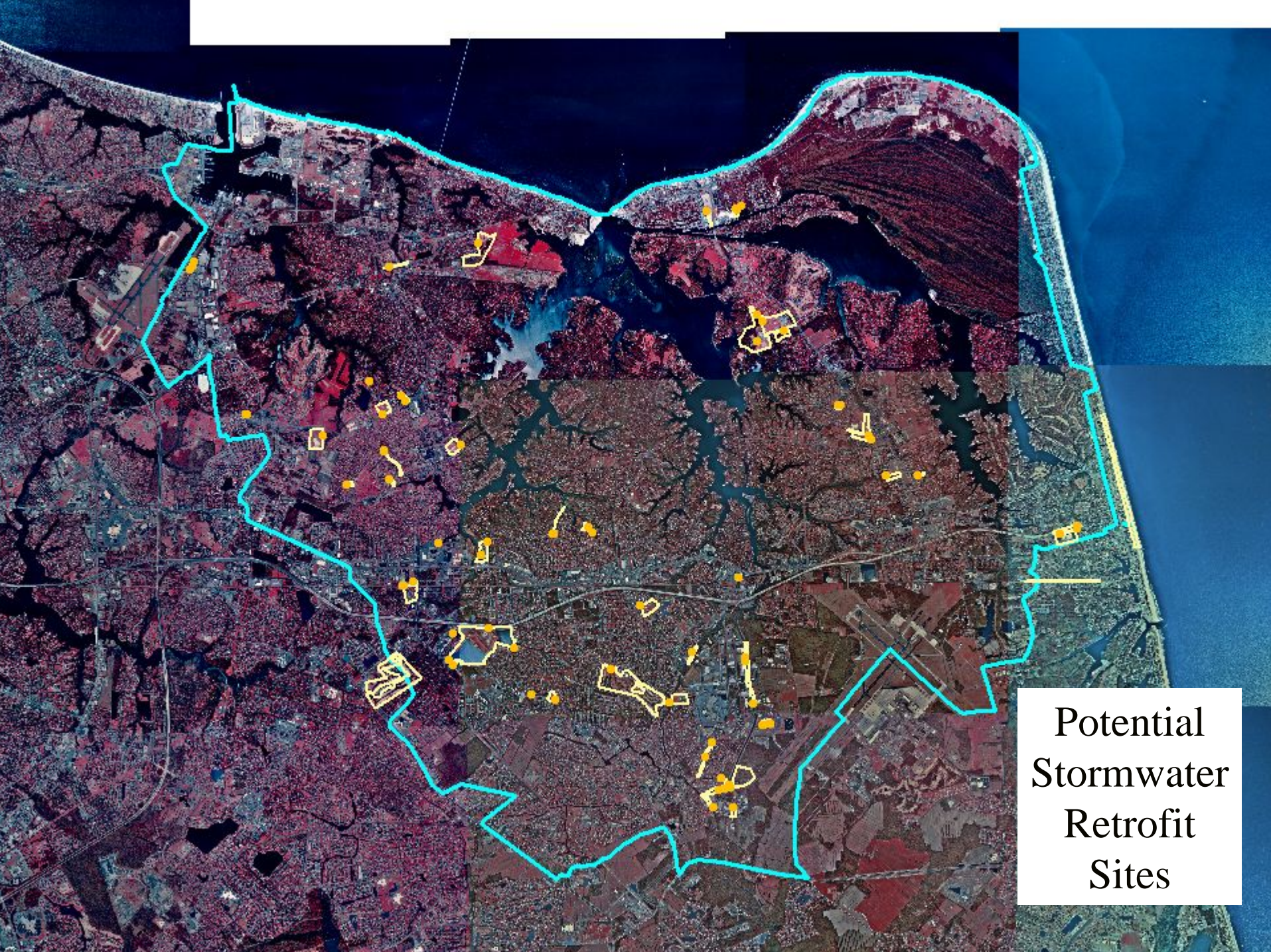
PROBLEMS

- INCREASED SEDIMENTATION
- DEGRADED WATER QUALITY
- 50% LOSS OF WETLANDS IN LAST 30 YEARS
- LOSS OF SAV'S
- 100% LOSS OF OYSTER PRODUCTION IN LAST 70 YEARS

OPPORTUNITIES

- WATER QUALITY IMPROVEMENTS
 - STORMWATER RUNOFF, FECALS, D.O.
- RESTORATION OF WETLANDS
 - INCLUDING PHRAGMITIES ISSUES
- RESTORATION OF RIPARIAN BUFFERS
- RESTORATION OF SAV'S
- RESTORATION OF OYSTER REEFS
- TIDAL PRISM DEPTH CHANGES/SILTATION
- CONTAMINATED SEDIMENT REMOVAL





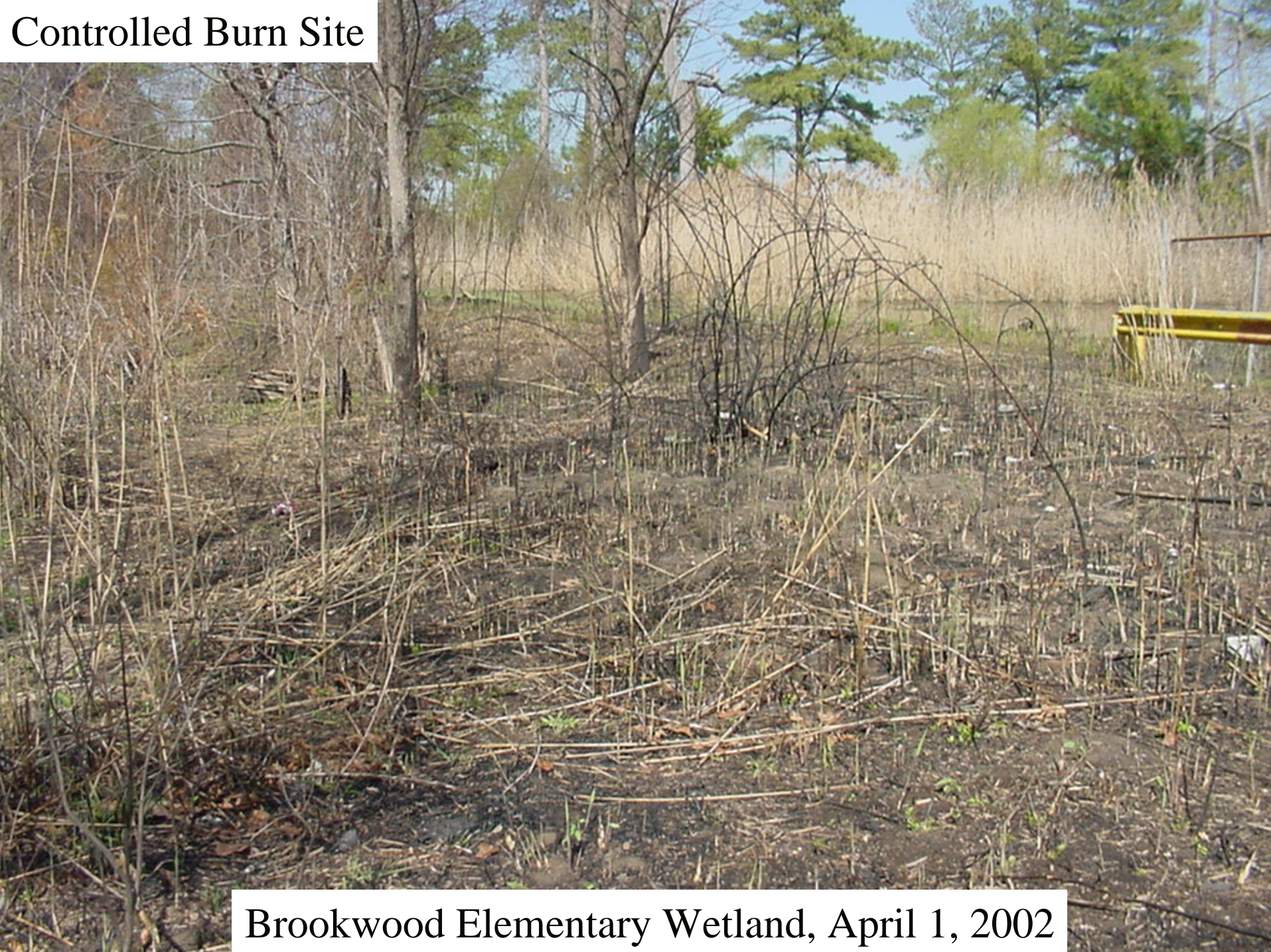
Potential
Stormwater
Retrofit
Sites

Controlled Burn Site



Brookwood Elementary Cypress Wetland, April 1, 2002

Controlled Burn Site



Brookwood Elementary Wetland, April 1, 2002

Controlled Burn Site



Brookwood Elementary Cypress Wetland, June 4, 2002

Controlled Burn Site



Brookwood Elementary Wetland, June 4, 2002

Example Stormwater Control Structure



Example Stormwater Control Structure



LOCAL SPONSOR(s)

CITY OF VIRGINIA BEACH
COMMONWEALTH OF VA?



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